RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.

Application Serial Number: _____ 10/561, 092 _____

Source: _____ JFWP _____

Date Processed by STIC: _____ 01/03/2006 _____

ENTERED

IFWP

RAW SEQUENCE LISTING   DATE: 01/03/2006
PATENT APPLICATION: US/10/561,092 TIME: 11:34:57

Input Set : A:\034123-109.ST25.txt
Output Set: N:\CRF4\01032006\J561092.raw

```
         3 <110> APPLICANT: THE REGENTS OF THE UNIVERSITY OF CALIFORNIA
         4        DOWDY, Steven F
         5        WADIA, Jehangir S
         7 <120> TITLE OF INVENTION: POLYPEPTIDE TRANSDUCTION AND FUSOGENIC PEPTIDES
         9 <130> FILE REFERENCE: 034123-109
C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/561,092
C--> 12 <141> CURRENT FILING DATE: 2005-12-16
       14 <150> PRIOR APPLICATION NUMBER: 60/480,065
       15 <151> PRIOR FILING DATE: 2003-06-20
       17 <160> NUMBER OF SEQ ID NOS: 21
       19 <170> SOFTWARE: PatentIn version 3.3
       21 <210> SEQ ID NO: 1
       22 <211> LENGTH: 86
       23 <212> TYPE: PRT
       24 <213> ORGANISM: Unknown
       26 <220> FEATURE:
       27 <223> OTHER INFORMATION: transducing protein
       29 <400> SEQUENCE: 1
       31 Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser
       32 1               5                   10                  15
       35 Gln Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Lys Lys Cys Cys Phe
       36             20                  25                  30
       39 His Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly
       40         35                  40                  45
       43 Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln Gly Ser Gln Thr
       44     50                  55                  60
       47 His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Arg Gly Asp
       48 65                  70                  75                  80
       51 Pro Thr Gly Pro Lys Glu
       52                 85
       55 <210> SEQ ID NO: 2
       56 <211> LENGTH: 20
       57 <212> TYPE: PRT
       58 <213> ORGANISM: Unknown
       60 <220> FEATURE:
       61 <223> OTHER INFORMATION: HA2 analog
       63 <400> SEQUENCE: 2
       65 Gly Leu Phe Gly Ala Ile Ala Gly Phe Ile Glu Gly Gly Trp Thr Gly
       66 1               5                   10                  15
       69 Met Ile Asp Gly
       70             20
       73 <210> SEQ ID NO: 3
       74 <211> LENGTH: 20
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Input Set : A:\034123-109.ST25.txt
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 75 <212> TYPE: PRT
 76 <213> ORGANISM: Unknown
 78 <220> FEATURE:
 79 <223> OTHER INFORMATION: HA2 analog
 81 <400> SEQUENCE: 3
 83 Gly Leu Phe Glu Ala Ile Ala Glu Phe Ile Glu Gly Gly Trp Glu Gly
 84 1               5                  10                  15
 87 Leu Ile Glu Gly
 88             20
 91 <210> SEQ ID NO: 4
 92 <211> LENGTH: 5
 93 <212> TYPE: PRT
 94 <213> ORGANISM: Unknown
 96 <220> FEATURE:
 97 <223> OTHER INFORMATION: linker moiety
 99 <400> SEQUENCE: 4
101 Gly Gly Gly Gly Ser
102 1               5
105 <210> SEQ ID NO: 5
106 <211> LENGTH: 6
107 <212> TYPE: PRT
108 <213> ORGANISM: Unknown
110 <220> FEATURE:
111 <223> OTHER INFORMATION: linker moiety
114 <220> FEATURE:
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116 <222> LOCATION: (6)..(6)
117 <223> OTHER INFORMATION: Xaa = any number of repeats of amino acids 1-5
119 <400> SEQUENCE: 5
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W--> 121 **Gly Gly Gly Gly Ser Xaa**
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122 1               5
125 <210> SEQ ID NO: 6
126 <211> LENGTH: 12
127 <212> TYPE: PRT
128 <213> ORGANISM: Unknown
130 <220> FEATURE:
131 <223> OTHER INFORMATION: linker moiety
133 <400> SEQUENCE: 6
135 Gly Lys Ser Ser Gly Ser Gly Ser Glu Ser Lys Ser
136 1               5                  10
139 <210> SEQ ID NO: 7
140 <211> LENGTH: 14
141 <212> TYPE: PRT
142 <213> ORGANISM: Unknown
144 <220> FEATURE:
145 <223> OTHER INFORMATION: linker moiety
147 <400> SEQUENCE: 7
149 Gly Ser Thr Ser Gly Ser Gly Lys Ser Ser Glu Gly Lys Gly
150 1               5                  10
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153 <210> SEQ ID NO: 8
154 <211> LENGTH: 18
155 <212> TYPE: PRT
156 <213> ORGANISM: Unknown
158 <220> FEATURE:
159 <223> OTHER INFORMATION: linker moiety
161 <400> SEQUENCE: 8
163 Gly Ser Thr Ser Gly Ser Gly Lys Ser Ser Glu Gly Ser Gly Ser Thr
164 1               5                   10                  15
167 Lys Gly
171 <210> SEQ ID NO: 9
172 <211> LENGTH: 18
173 <212> TYPE: PRT
174 <213> ORGANISM: Unknown
176 <220> FEATURE:
177 <223> OTHER INFORMATION: linker moiety
179 <400> SEQUENCE: 9
181 Gly Ser Thr Ser Gly Ser Gly Lys Pro Gly Ser Gly Glu Gly Ser Thr
182 1               5                   10                  15
185 Lys Gly
189 <210> SEQ ID NO: 10
190 <211> LENGTH: 14
191 <212> TYPE: PRT
192 <213> ORGANISM: Unknown
194 <220> FEATURE:
195 <223> OTHER INFORMATION: linker moiety
197 <400> SEQUENCE: 10
199 Glu Gly Lys Ser Ser Gly Ser Gly Ser Glu Ser Lys Glu Phe
200 1               5                   10
203 <210> SEQ ID NO: 11
204 <211> LENGTH: 30
205 <212> TYPE: PRT
206 <213> ORGANISM: Unknown
208 <220> FEATURE:
209 <223> OTHER INFORMATION: HA2 TAT peptide
211 <400> SEQUENCE: 11
213 Gly Leu Phe Gly Ala Ile Ala Gly Phe Ile Glu Asn Gly Trp Glu Gly
214 1               5                   10                  15
217 Met Ile Asp Gly Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg
218             20                  25                  30
221 <210> SEQ ID NO: 12
222 <211> LENGTH: 20
223 <212> TYPE: PRT
224 <213> ORGANISM: Unknown
226 <220> FEATURE:
227 <223> OTHER INFORMATION: HA2 peptide
229 <400> SEQUENCE: 12
231 Gly Leu Phe Gly Ala Ile Ala Gly Phe Ile Glu Asn Gly Trp Glu Gly
232 1               5                   10                  15
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RAW SEQUENCE LISTING   DATE: 01/03/2006
PATENT APPLICATION: US/10/561,092 TIME: 11:34:57

Input Set : A:\034123-109.ST25.txt.
Output Set: N:\CRF4\01032006\J561092.raw

235 Met Ile Asp Gly
236   20
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240 <211> LENGTH: 418
241 <212> TYPE: DNA
242 <213> ORGANISM: Unknown
244 <220> FEATURE:
245 <223> OTHER INFORMATION: cDNA
247 <400> SEQUENCE: 13
248 gcgtagagga tcgagatctc gatcccgcga aattaatacg actcactata ggggaattgt   60
250 gagcggataa caattcccct ctagaaataa ttttgtttaa ctttaagaag gagatatacc .   120
252 atgggcagca gccatcatca tcatcatcac agcagcggcc tggtgccgcg cggcagccat   180
254 atgaggaaga agcggagaca gcgacgaaga ggctcggatc cgaattcgag ctccgtcgac   240
256 aagcttgcgg ccgcactcga gcaccaccac caccaccact gagatccggc tgctaacaaa   300
258 gcccgaaagg aagctgagtt ggctgctgcc accgctgagc aataactagc ataacccctt   360
260 ggggcctcta aacgggtctt gaggggtttt ttgctgaaag gaggaactat atccggat   418
263 <210> SEQ ID NO: 14
264 <211> LENGTH: 418
265 <212> TYPE: DNA
266 <213> ORGANISM: Unknown
268 <220> FEATURE:
269 <223> OTHER INFORMATION: cDNA
271 <400> SEQUENCE: 14
272 cgcatctcct agctctagag ctagggcgct ttaattatgc tgagtgatat cccccttaaca   60
274 ctcgcctatt gttaagggga gatctttatt aaaacaaatt gaaattcttc ctctatatgg   120
276 tacccgtcgt cggtagtagt agtagtagtg tcgtcgccgg accacggcgc gccgtcggta   180
278 tactccttct tcgcctctgt cgctgcttct ccgagcctag gcttaagctc gaggcagctg   240
280 ttcgaacgcc ggcgtgagct cgtggtggtg gtggtggtga ctctaggccg acgattgttt   300
282 cgggcttttcc ttcgactcaa ccgacgacgg tggcgactcg ttattgatcg tattggggaa   360
284 ccccggagat ttgcccagaa ctccccaaaa aacgactttc ctccttgata taggccta   418
287 <210> SEQ ID NO: 15
288 <211> LENGTH: 53
289 <212> TYPE: PRT
290 <213> ORGANISM: Unknown
292 <220> FEATURE:
293 <223> OTHER INFORMATION: TAT peptide
295 <400> SEQUENCE: 15
297 Met Gly Ser Ser His His His His His His Ser Ser Gly Leu Val Pro
298 1   5   10   15
301 Arg Gly Ser His Met Arg Lys Lys Arg Arg Gln Arg Arg Arg Gly Ser
302   20   25   30
305 Asp Pro Asn Ser Ser Ser Val Asp Lys Leu Ala Ala Ala Leu Glu His
306   35   40   45
309 His His His His His
310   50
313 <210> SEQ ID NO: 16
314 <211> LENGTH: 360
315 <212> TYPE: DNA
316 <213> ORGANISM: Unknown

RAW SEQUENCE LISTING   DATE: 01/03/2006
PATENT APPLICATION: US/10/561,092   TIME: 11:34:57

Input Set : A:\034123-109.ST25.txt
Output Set: N:\CRF4\01032006\J561092.raw

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318 <220> FEATURE:
319 <223> OTHER INFORMATION: cDNA
321 <400> SEQUENCE: 16
322 gcgtagagga tcgagatctc gatcccgcga aattaatacg actcactata ggggaattgt     60
324 gagcggataa caattcccct ctagaaataa ttttgtttaa ctttaagaag gagatatacc    120
326 atgggcagga agaagcggag acagcgacga agaggccata tggctagcat gactggtgga    180
328 cagcaaatgg gtcgggatcc gaattcgagc tccgtcgaca agcttgcggc cgcactcgag    240
330 caccaccacc accaccactg agatccggct gctaacaaag cccgaaagga agctgagttg    300
332 gctgctgcca ccgctgagca ataactagca taaccccttg gggcctctaa acgggtcttg    360
335 <210> SEQ ID NO: 17
336 <211> LENGTH: 360
337 <212> TYPE: DNA
338 <213> ORGANISM: Unknown
340 <220> FEATURE:
341 <223> OTHER INFORMATION: cDNA
343 <400> SEQUENCE: 17
344 cgcatctcct agctctagag ctaggcgct ttaattatgc tgagtgatat ccccttaaca     60
346 ctcgcctatt gttaagggga gatctttatt aaaacaaatt gaaattcttc ctctatatgg    120
348 tacccgtcct tcttcgcctc tgtcgctgct tctccggtat accgatcgta ctgaccacct    180
350 gtcgtttacc cagccctagg cttaagctcg aggcagctgt tcgaacgccg gcgtgagctc    240
352 gtggtggtgg tggtggtgac tctaggccga cgattgtttc gggctttcct tcgactcaac    300
354 cgacgacggt ggcgactcgt tattgatcgt attggggaac cccggagatt tgcccagaac    360
357 <210> SEQ ID NO: 18
358 <211> LENGTH: 46
359 <212> TYPE: PRT
360 <213> ORGANISM: Unknown
362 <220> FEATURE:
363 <223> OTHER INFORMATION: TAT peptide
365 <400> SEQUENCE: 18
367 Met Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Gly His Met Ala Ser
368 1               5                   10                  15
371 Met Thr Gly Gly Gln Gln Met Gly Arg Asp Pro Asn Ser Ser Ser Val
372             20                  25                  30
375 Asp Lys Leu Ala Ala Ala Leu Glu His His His His His His
376         35                  40                  45
379 <210> SEQ ID NO: 19
380 <211> LENGTH: 1437
381 <212> TYPE: DNA
382 <213> ORGANISM: Unknown
384 <220> FEATURE:
385 <223> OTHER INFORMATION: cDNA
387 <400> SEQUENCE: 19
388 gcgccggtga tgccggccac gatgcgtccg gcgtagagga tcgagatctc gatcccgcga     60
390 aattaatacg actcactata ggggaattgt gagcggataa caattcccct ctagaaataa    120
392 ttttgtttaa ctttaagaag gagatatacc atgggcagga agaagcggag acagcgacga    180
394 agaggccata tggctagcat gactggtgga cagcaaatgg gtcgggatcc gaattccatg    240
396 tccaatttac tgaccgtaca ccaaaatttg cctgcattac cggtcgatgc aacgagtgat    300
398 gaggttcgca agaacctgat ggacatgttc agggatcgcc aggcgttttc tgagcatacc    360
400 tggaaaatgc ttctgtccgt ttgccggtcg tgggcggcat ggtgcaagtt gaataaccgg    420
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RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 01/03/2006
PATENT APPLICATION: US/10/561,092   TIME: 11:34:58

Input Set : A:\034123-109.ST25.txt
Output Set: N:\CRF4\01032006\J561092.raw

<u>Please Note:</u>
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:5; Xaa Pos. 6

VERIFICATION SUMMARY
PATENT APPLICATION: US/10/561,092

DATE: 01/03/2006
TIME: 11:34:58

Input Set : A:\034123-109.ST25.txt
Output Set: N:\CRF4\01032006\J561092.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application Number
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:115 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:5
L:121 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0